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application. Claim 13 reads that the "...relative amounts by weight being respectively 30-90g...". The correct ratio should be 30-90 % as originally filed.

The Office Action is directed to the invention elected, namely the invention of the Office's Restriction Group I drawn to a prepolymer. All claims are rejected under 35 USC § 112, second paragraph for indefiniteness because the term "high-performance" is considered to be relative terminology. With this Response and Amendment, the language has been canceled from the claims.

Claim 4 is rejected under 35 USC § 112, second paragraph for indefiniteness because it provides no further limitation on the broad or generic claim. With Response and Amendment, the claim has been amended to provide appropriate limitation and an additional claim has been added to cover the subject matter deleted from Claim 4 to comply with the Office's request.

Claims 5, 10, and 13 are rejected under 35 USC § 112, second paragraph for indefiniteness because the applicants have not disclosed how/why the prepolymers of these claims are liquid. With this Response and Amendment, the language has been canceled from Claim 5. In addition, the "liquid" condition has been defined to occur at "room temperature". Room temperature stable liquid curatives are not represented in the market; however, their performance characteristics will become apparent and distinguishing from the following.

Claims 10, and 13 are rejected under 35 USC § 112, second paragraph for indefiniteness because the Office is confused by the claim language which claims addition of a stoichiometric equivalent amount of what the Office perceives to be another curative. The applicants can understand the Office's confusion and, with this Response and Amendment, seek to clarify the unique

characteristics of the invention. To begin with, broad Claim 10 is now amended to claim the "room temperature liquid curative of Claim 1, thereby distinguishing the claim from the "room temperature liquid stable prepolymer" of Claim 1, which is castable with the room temperature liquid curative. Support for the corrective amendment may be found in the original Claims 10 and 13, which always defined the curative, but which originally included a preface referring to the prepolymers. As the preface was redundant and confusing, it has been deleted from these claims.

What is more, the claimed curatives are unique in that they do, indeed, consist of various components including the room temperature liquid stable prepolymer of Claim 1. One skilled in the art understands that curatives are designed to be highly reactive, which reactivity results in the generation of heat during the curing process. The instant prepolymers are, however, curable at room temperature. Thus, the inventiveness of these claims resides in that the applicants have discovered that by the addition of a portion of the short-chain prepolymer to the curative, the reactivity of the curative is attenuated without the addition of any substances which would alter the composition of the cured prepolymer. By adding the prepolymer to the curative, the applicants have effectively reduced the number of active sites on the curative, thereby controlling the rate of reactivity and thereby formulating a liquid curative active at room-temperature.

Finally, all claims are rejected under 35 USC § 112, second paragraph for indefiniteness because the claims do not define the basis for the weight percentage values. With this Response and Amendment, the applicants have amended the claims to define the ratio in relative amounts weight/weight.

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NOV 06 2002
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NOV 0 8 2002
TC 1700

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Accordingly, entry of the present amendment, reconsideration of all grounds of objection and rejection, withdrawal thereof, and passage of this application to issue are all hereby respectfully solicited.

It should be apparent that the undersigned attorney has made an earnest effort to place this application into condition for immediate allowance. If he can be of assistance to the Examiner in the elimination of any possibly-outstanding insignificant impediment to an immediate allowance, the Examiner is respectfully invited to call him at his below-listed number for such purpose.

Allowance is solicited.

Respectfully submitted,

THE FIRM OF HUESCHEN AND SAGE

By: G. PATRICK SAGE

G. PATRICK SAGE

Dated: November 1, 2002
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Enclosure: Postal Card Receipt,
Fee for one (1) month extension, $55.00, and
Amended Claims in Clean and Marked-up forms.

* * * * *

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY FURTHER OR ADDITIONAL FEES WHICH MAY BE REQUIRED (DUE TO OMISSION, DEFICIENCY, OR DEFECT IN THE ATTACHED CHECK, OR OTHERWISE), OR TO CREDIT ANY OVERPAYMENT, TO DEPOSIT ACCOUNT NO. 08,3220.

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Amended Claims (Marked Form)

- 1 - (amended)

A room-temperature liquid stable prepolymer (P) which is the reaction product of

a) methylene diphenylisocyanate or a prepolymer of methylene diphenylisocyanate and an about 500-1000 equivalent weight polytetramethylene ether glycol or polyoxypropylene/polyoxyethylene diol or triol having at least 21% residual NCO,

b) polytetramethylene ether glycol of about 500 to 1000 equivalent weight, and

c) a polyoxypropylene/polyoxyethylene triol or polyoxypropylene triol of about 1300 to 2000 equivalent weight,

the percentage [by] weight/weight in the prepolymer (P) being about 32 to 72% of (a), about 52 to 22% of (b), and about 6 to 15% of (c), and the percentage of residual NCO in the prepolymer (P) being about 6 to 18% by weight,

the prepolymer (P) having a viscosity at room temperature of about 1200 to 26000 cps,

which prepolymer (P) is curable and castable with a suitable curative at room temperature to yield a [high-performance] urethane elastomer.

- 2 - (amended)

The prepolymer(P) of Claim 1 wherein the percentage of residual NCO in the prepolymer(P) is about 11.5-13.5% [by] weight/weight and wherein the prepolymer (P) has a room temperature viscosity of about 3500 to 5000 cps.

- 4 - (amended)

The prepolymer (P) of Claim 1 wherein c) is a polyoxypropylene/polyoxyethylene triol having an equivalent weight of about 1300 to 2000 [or a polyoxypropylene triol having an equivalent weight of about 1300 to 2000].

- 5 - (amended)

The prepolymer (P) of Claim 1 wherein (a) is a [liquid] uretonimine-modified methylene diphenylisocyanate.

OIPE
NOV 0 6 2002
PATENT & TRADEMARK OFFICE
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NOV 0 8 2002
TC 1700

- 10 - (amended)

The [prepolymer (P) of Claim 1 which is curable at room temperature with an approximately stoichiometric equivalent of a] suitable room temperature liquid curative of Claim 1 consisting essentially of the following components:

(1) a polyoxypropylene/-polyoxyethylene diol of about 1000 to 2000 equivalent weight, (2) a polyoxypropylene/-polyoxyethylene triol of about 1300 to 2000 equivalent weight, (3) a chain extender having an equivalent weight of about 25 to 125, (4) [a] the room-temperature liquid stable prepolymer (P) as defined in Claim 1 [having a 6 to 18% residual NCO], (5) a diluent, (6) a degassing aid, and (7) a urethane catalyst, the relative amounts [by] weight/weight being respectively 30 – 90%, 3 – 20%, 5 – 30%, 0 – 30%, 0 – 15%, 0.001 – 0.05%, and 0.01 – 0.5%.

- 13 - (amended)

The [prepolymer (P) of Claim 1 which is curable at room temperature with an approximately stoichiometric equivalent of a] suitable room temperature liquid curative of Claim 1 consisting essentially of the following components:

(1) a polyoxypropylene/-polyoxyethylene diol of about 1000 to 2000 equivalent weight, (2) a polyoxypropylene/-polyoxyethylene triol of about 1300 to 2000 equivalent weight, (3) a chain extender having an equivalent weight of about 25 to 125, (4) [a] the room-temperature liquid stable prepolymer (P) as defined in Claim 1 [having a 6 to 18% residual NCO], (5) a diluent, (6) a degassing aid, and (7) a urethane catalyst, the relative amounts [by] weight/weight being respectively 30 – 90%, 3 – 20%, 5 – 30%, 0 – 30%, 0 – 15%, 0.001 – 0.05%, and 0.01 – 0.5% to give a cured urethane elastomer having the following properties after mixing and curing for seven days at room temperature:

Tensile strength (ASTM Method D-412)	about 1300-2700 psi
Elongation (ASTM Method D-412)	about 250-700%
Die C Tear (ASTM Method D-695)	about 140-400 pli
Split Tear (ASTM Method D-1938)	about 20-100 pli
Rebound (ASTM Method D-2632)	about 45-65%
Shore A Hardness (ASTM Method D-2240)	about 70-95
Gel time (25°C)	about 14-40 min..

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NOV 06 2002
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NOV 08 2002
TC 1700

- 18 - (amended)

The prepolymer (P) of Claim 2 wherein the percentages [by] weight/weight of a), b), and c) are respectively about 54%, about 36%, and about 10%.

- 34 - (amended)

The prepolymer (P) of Claim 1 wherein c) is a polyoxypropylene triol having an equivalent weight of about 1300 to 2000.